

CLAIMS

We claim:

1. A force-transmitting head for a chiropractic adjustor apparatus comprising:
 - a) a body;
 - b) a cavity formed in one end of the body;
 - c) a hub rotatable in the cavity relative to the body;
 - d) at least one track formed in the hub; and
 - e) at least one rotation pin extending from the body into the cavity and engaging said at least one track such that longitudinal movement of the hub relative to the body allows rotational movement of the body with passage of the rotation pin along the track.
2. The force-transmitting head according to claim 1 further comprising a pair of complementary tracks formed in the hub and a pair of corresponding rotation pins.
3. The force-transmitting head according to claim 1 further comprising a biasing means located between the hub and the body to bias the pin towards one end of the track.
4. The force-transmitting head according to claim 3 wherein the biasing means is a spring.
5. The force-transmitting head according to claim 1 wherein the rotation pin extends through a wall of the cavity.
6. The force-transmitting head of claim 1 wherein the track is substantially L-shaped.
7. The force-transmitting head of claim 6 wherein the compression of the biasing means moves the hub relative to the rotation pin until the rotation pin is positioned in a portion of the L shape that avoids rotational movement of the body with longitudinal movement of the hub.

8. The force-transmitting head of claim 1 wherein the track has an arcuate shape such that the degree of rotational movement of the body varies with the longitudinal movement of the hub relative to the body.
9. A chiropractic adjustor apparatus comprising:
 - a) a housing having a central interior cavity;
 - b) an electromagnetic drive mechanism mounted in the interior cavity of the housing;
 - c) a shaft extending through the electromagnetic drive mechanism and extending beyond the housing;
 - d) means for actuating the electromagnetic drive mechanism to cause repetitive reciprocal movement of the shaft along a longitudinal axis of the shaft and relative to the housing; and
 - e) a force-transmitting head comprising:
 - (i) a body;
 - (ii) a cavity formed in one end of the body;
 - (iii) a hub attached to the shaft and rotatable in the cavity relative to the body;
 - (iv) at least one track formed in the hub; and
 - (v) at least one rotation pin extending from the body into the cavity and engaging said at least one track such that repetitive reciprocal movement of the shaft and hub causes rotational movement of the body with passage of the rotation pin along the track.
10. The chiropractic adjustor apparatus according to claim 9 wherein the shaft includes a shaped element and the hub includes a complementary shaped aperture and the hub is attached to the shaft by aligning the shaped aperture with the shaped element.
11. The device according to claim 10 wherein the shaped element and the shaped aperture are polygonal.
12. The chiropractic adjustor apparatus according to claim 11 wherein the shaped element and the shaped aperture are hexagonal.

13. The chiropractic adjustor apparatus according to claim 9 further comprising a locking screw that attaches the hub to the shaft.
14. The chiropractic adjustor apparatus according to claim 9 wherein the adjustor is electromechanical.
15. The chiropractic adjustor apparatus according to claim 9 wherein the adjustor is pneumatic.